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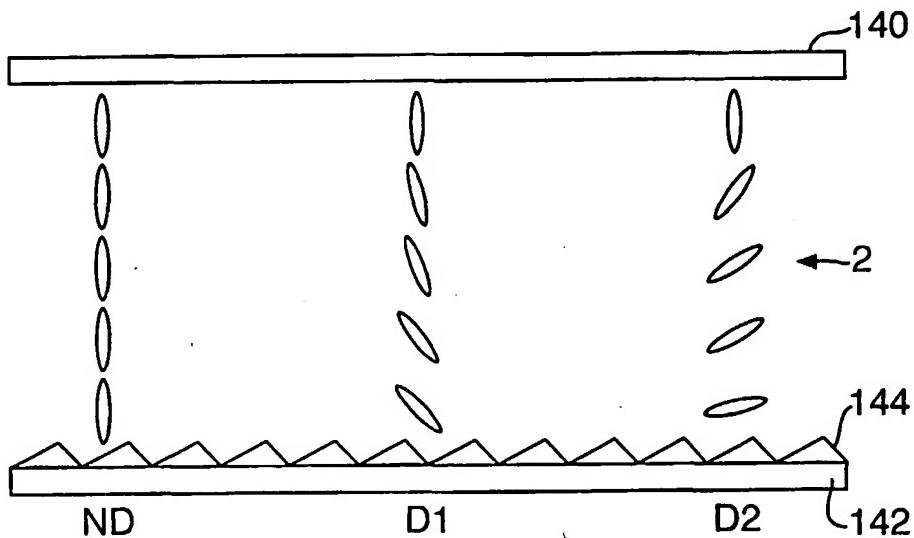
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(54) Title: LIQUID CRYSTAL DEVICE



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(57) Abstract: Liquid crystal devices are described that exhibit bistable, tri-stable or other multistable operation. The stable liquid crystal configurations are attained using a surface alignment grating (144) on the internal surface of at least one cell wall (142). The surface profile of the surface alignment grating comprises three or more defect sites per grating period and permit the liquid crystal molecules to adopt any one of two or more stable pretilt angles in the same azimuthal plane. Application of a suitable voltage causes the liquid crystal material to switch between the stable configurations.